

FY 2020 Rural Mail Count

I. PREFACE

A. Purpose and Content

USPS-FY20-40 aggregates data collected from the most recent (March 2018) Rural Mail Count (RMC) for two purposes: 1) to determine the sizes of the cost pools by route type ('Evaluated' and 'Other'); and 2) to use the results from part 1) to calculate volume variability factors by route type. The relevant results of this aggregation are included in USPS-FY20-32 and USPS-FY20-NP14 (commonly called the "B" Workpapers) in workbook I-Forms, tab I-Factors.

B. Predecessor Documents

ACR 2019, USPS-FY19-40.

C. Corresponding Non-Public or Public Document

There is no corresponding non-public document to USPS-FY20-40.

D. Methodology Changes

None

E. Input/Output

USPS-FY20-40 relies on no inputs from other ACR materials. Outputs are used by USPS-FY20-32 and USPS-FY20-NP14.

II. ORGANIZATION

In addition to this preface, the relevant source code and RMC data are provided in a zip file. The contents of the zip file are described below.

The zip file that accompanies USPS-FY20-40 includes the following files:

FY2018.March.RMCFat.Data
RMC2020AnalysisforCRA.sas

RMC Dataset
SAS program for analysis of RMC data

III. RMC DOCUMENTATION

A. Overview

USPS-FY20-40 contains the data from the March 2018 RMC and the SAS program, SAS log, and SAS output files from the March 2018 RMC. The SAS log and corresponding output file are included starting on page 3 of this preface.

The RMC data has the most recent route evaluations performed on each active rural route. The data includes the route type ('Evaluated' and 'Other'), counts for each evaluation item, and the time allowance given for each evaluation item. The output from the SAS program is used in two ways: 1) to determine the sizes of the cost pools by route type; and 2) to use the results from part 1) to calculate volume variability factors by route type. The most recent evaluation was used for the FY2020 Cost and Revenue Analysis Report (CRA). The RMC conducted in March 2018 was used for FY2020.

B. Use of RMC in Cost Attribution

Rural carrier variability ratios are used to divide total rural carrier labor costs into variable and non-variable costs, as shown in USPS-FY20-32 and USPS-FY20-NP14, workbook CS10.xls, tab WS 10.0.1. Average weekly pieces are used to divide variable evaluation factors into cost pools for each rural evaluation category, such as the delivery of cased letters, FSS flats, and parcels. This analysis using the March 2018 RMC data is shown in workbook CS10.xls, tabs WS10.1.1 PQ1-2, WS10.2.1 PQ1-2, WS10.1.1 PQ3-4 and WS10.2.1 PQ 3-4.

C. RMC Data and Analysis

The RMC dataset contains the most recent evaluation for each rural route. The March 2018 dataset has 75,177 records. Each record represents an active rural route and it includes the type of route ('Evaluated' and 'Other'), totals by each evaluation factor, number of weeks the route was counted, and the time allotment by evaluation item. Those data elements are used to compute the average time by evaluation category per route. The averages are then aggregated by route type for each evaluation item. Each evaluation item is treated as either 'fixed' (e.g. boxes served) or 'variable' (e.g. DPS letters delivered). The volume variability factor for each route type is calculated by taking the ratio of the sum of all variable evaluation factors to the total over the sum of fixed and variable evaluation factors by route type.

D. SAS Log Listing

SAS log from the March 2018 RMC data file.

NOTE: SAS initialization used:

| | |
|-----------|--------------|
| real time | 1.36 seconds |
| cpu time | 0.76 seconds |

```

1
2 libname RMC "Y:\Cost Attribution\FY20 ACR\FY20-USPS-40\SAS";
NOTE: Libref RMC was successfully assigned as follows:
      Engine:      V9
      Physical Name: Y:\Cost Attribution\FY20 ACR\FY20-USPS-40\SAS
3 OPTION USER =RMC;
4
5 options nocenter;
6 options nodate;
7 options nonumber;
8
9 filename MAIL 'Y:\Cost Attribution\FY20 ACR\FY20-USPS-40\FY2018.MARCH.RMCFLAT.DATA';
10 run;
11 *****READ IN UNIVERSE DATA;
12 DATA A ; INFILE MAIL MISSOVER LRECL = 820;
13 Input
14 RTTYPE $ 1-5
15 MILES 6-10 .2
16 BOXESR 11-20
17 BOXESC 21-30
18 NDCBU 31-40
19 PARLOCK 41-50
20 LETTERS 51-60
21 FLATS 61-70
22 PARCELS 71-80
23 BOXHOLD 81-90
24 REGCERT 91-100
25 CODCUST 101-110
26 CHGADDR 111-120
27 MARKUP 121-130
28 f3821 131-140
29 DPS 141-150
30 SECSEG 151-160
31 MONORDR 161-170
32 LETCOLL 171-180
33 PARCACC 181-190
34 REGACC 191-200
35 POSTDUE 201-210
36 LOADING 211-220
37 ALLOW 221-230
38 DSMOUNT 231-240
39 DSMFEET 241-250
40 PURCHST 251-260 .2
41 RETRCT 261-270 .2
42 POUCHST 271-280 .2
43 DLLETTRT 281-290 .2
44 DLFLATT 291-300 .2
45 DLPAROT 301-310 .2
46 DLPARRT 311-320 .2

```

47 WITHDT 321-330 .2
48 STRAPT 331-340 .2
49 LOADNGT 341-350 .2
50 RETRCTT 351-360 .2
51 DISMNTT 361-370 .2
52 DISMNTDT 371-380 .2
53 BOXHLDT 381-390 .2
54 CODCSOT 391-400 .2
55 DLREGOT 401-410 .2
56 MARKUPT 411-420 .2
57 ADDREST 421-430 .2
58 MNORDOT 431-440 .2
59 COLLFT 441-450 .2
60 PPACCOT 451-460 .2
61 STAMPST 461-470 .2
62 F3821T 471-480 .2
63 ALLOWT 481-490 .2
64 POSTDUT 491-500 .2
65 PERSNLT 501-510 .2
66 CODCSRT 511-520 .2
67 DLREGRT 521-530 .2
68 MNORDRT 531-540 .2
69 PPACCRT 541-550 .2
70 COLREGT 551-560 .2
71 MILEST 561-570 .2
72 BOXESRT 571-580 .2
73 BOXESCT 581-590 .2
74 NDCBUT 591-600 .2
75 PARLCKT 601-610 .2
76 POUCHT 611-620 .2
77 SECSEGT 621-630 .2
78 DPST 631-640 .2
79 GOVVEHT 641-650 .2
80 REUNLDT 651-660 .2
81 TOTHRS 661-670 .2
82 TOTMIN 671-680 .2
83 ACTLHRS 681-690 .2
84 YEAR 691-695
85 SCANITEM 696-705
86 CPU 706-715
87 CPUITEM 716-725
88 DPSFLAT 726-735
89 PARS 736-745
90 SCANT 746-755 .2
91 SCNITEMT 756-765 .2
92 CPUOFCT 766-775 .2
93 CPURTET 776-785 .2
94 CPUITEMT 786-795 .2
95 DPSFLATT 796-805 .2
96 PARST 806-815 .2
97 Cntlen 816
98 LSTATUS \$ 818
99 GOVVEH \$ 820 ;
100

NOTE: The infile MAIL is:

Filename=Y:\Cost Attribution\Bonnie\FY20 ACR\FY20-USPS-40\FY2018.MARCH.RMCFLAT.DATA,
RECFM=V,LRECL=820,File Size (bytes)=61795494,

Last Modified=08May2018:09:13:37,
 Create Time=30Oct2020:12:33:11

NOTE: 75177 records were read from the infile MAIL.

The minimum record length was 820.

The maximum record length was 820.

NOTE: The data set RMC.A has 75177 observations and 86 variables.

NOTE: DATA statement used (Total process time):

real time 1:12.74

cpu time 0.32 seconds

```
101 proc print data = a(obs = 200); var cntlen boxesr boxesc ndcbu boxhold boxhldt;
102 run;
```

NOTE: There were 200 observations read from the data set RMC.A.

NOTE: PROCEDURE PRINT used (Total process time):

real time 2.64 seconds

cpu time 0.01 seconds

```
103
104
105
106 DATA A;
107 SET A;
108
109 IF RTTYPE = 'H' OR RTTYPE = 'J' OR RTTYPE = 'K' THEN TYPE = 'EVAL';
110 ELSE IF RTTYPE = 'A' OR RTTYPE = 'M' THEN TYPE = 'OTHR';
111 ELSE DELETE;
112
113
```

NOTE: There were 75177 observations read from the data set RMC.A.

NOTE: The data set RMC.A has 75177 observations and 87 variables.

NOTE: DATA statement used (Total process time):

real time 1:11.16

cpu time 0.07 seconds

```
114 PROC FREQ DATA = A; TABLES YEAR*TYPE;
```

NOTE: There were 75177 observations read from the data set RMC.A.

NOTE: PROCEDURE FREQ used (Total process time):

real time 53.67 seconds

cpu time 0.03 seconds

```
115 DATA A; SET A;
116
117 LETTERS = LETTERS / CNTLEN;
118 FLATS = FLATS / CNTLEN;
119 PARCELS = PARCELS / CNTLEN;
120 BOXHOLD = BOXHOLD / CNTLEN;
121 REGCERT = REGCERT / CNTLEN;
122 CODCUST = CODCUST / CNTLEN;
123 MARKUP = MARKUP / CNTLEN;
124 MONORDR = MONORDR / CNTLEN;
```

```

125 DPS = DPS / CNTLEN;
126 LETCOLL = LETCOLL / CNTLEN;
127 PARCACC = PARCACC / CNTLEN;
128 REGACC = REGACC / CNTLEN;
129 POSTDUE = POSTDUE / CNTLEN;
130 LOADING = LOADING / CNTLEN;
131 RETRCT = RETRCT / CNTLEN;
132 SECSEG = SECSEG / CNTLEN;
133 F3821 = F3821 / CNTLEN;
134 CHGADDR = CHGADDR / CNTLEN;
135 DSMOUNT = DSMOUNT / CNTLEN;
136 DSMFEET = DSMFEET / CNTLEN;
137 SCANITEM = SCANITEM / CNTLEN;
138 CPU = CPU / CNTLEN;
139 CPUITEM = CPUITEM / CNTLEN;
140 DPSFLAT = DPSFLAT / CNTLEN;
141 PARS = PARS / CNTLEN;
142 ****,
143 *** CALCULATE AVERAGE VALUES PER ROUTE ***;
144 ****,
145 ****;

```

NOTE: There were 75177 observations read from the data set RMC.A.

NOTE: The data set RMC.A has 75177 observations and 87 variables.

NOTE: DATA statement used (Total process time):

```

real time      1:08.65
cpu time       0.14 seconds

```

```

146 DATA A; SET A;
147 BOXESRL = 0;
148 L=0;
149 IF LSTATUS = 'L' THEN DO
150   BOXESRL = BOXESR;
151   BOXESR=0;
152   L = 1;
153 END;
154 *;
155 *SEASONAL ROUTES WILL HAVE VERY LOW MILEAGE PUT IN TO KEEP;
156 *ROUTE ACTIVE, SO REMOVE ROUTES WITH LOW MILEAGE;
157 *;
158 IF LETTERS = 0 or MILES LE .5 then delete;
159 OUTPUT;

```

NOTE: There were 75177 observations read from the data set RMC.A.

NOTE: The data set RMC.A has 75159 observations and 89 variables.

NOTE: DATA statement used (Total process time):

```

real time      1:00.93
cpu time       0.29 seconds

```

```

160 DATA A; SET A;
161 *;
162 *NEW STARTING OCT 30 2004 - ALL RURAL ROUTES TO GET 18 MIN;
163 *FOR RELOAD/UNLOAD TIME. SEE MOU;
164 *EVALUATION MAY NOT SHOW THIS, SO PUT IT IN;
165 *THE 18 MIN IS THE SAME REGARDLESS OF VOLUME, SO PUT IN;
166 *FIXED TIME;

```

```

167  *;
168  REUNLDT = 18;
169  *;
170  * ALSO, IN FY 2005 ADDED IN GOVERNMENT VEHICLE USAGE TIME
171  * TO FIXED FACTORS;
172  ****;
173  * NEW FOR FY 2009;
174  * SCANT = 6 MIN PER WEEK;
175  * SCANNER ITEMS = NON-SIGNATURE SCANT ITEMS, 18 SEC PER SCAN;
176  * INCLUDES DEL CON, SCAN, DU SAT & BUN SCANT
177  * CARRIER PICKUP = NUMBER OF REQUESTS (90 SEC PER REQUEST),
178  *           NUMBER OF ITEMS (9 SEC PER ITEM),
179  *           INCLUDES EM, PRIO, INTL
180  * 3982 LABELS = PARS LABEL, 15 SEC
181  ****;
182  * CALCULATE THE AVERAGE VALUE PER WEEK FOR EACH EVALUATION ITEM **;
183  * TO PUT INTO SPREADSHEETS WS 10.1.1 AND 10.2.1      **;
184  ****;
185  * FSS EVALUATION FACTOR (I.E. DPS FLATS) DIFFERENT FOR GOVVEH / NON GOVVEH - NEW FY
2011;
186  * new for sept. 2012 RMC do same for DPS;
187
188  FSS1 = 0; FSS2 = 0;
189  DPS1 = 0; DPS2 = 0;
190  IF GOVVEH = 'G' THEN DO;
191    FSS1 = DPSFLAT; FSS2 = 0;
192    DPS1 = DPS; DPS2=0;
193  END;
194  ELSE DO;
195    FSS2 = DPSFLAT; FSS1 = 0;
196    DPS2 = DPS; DPS1 = 0;
197  END;
198

```

NOTE: There were 75159 observations read from the data set RMC.A.

NOTE: The data set RMC.A has 75159 observations and 93 variables.

NOTE: DATA statement used (Total process time):

| | |
|-----------|--------------|
| real time | 1:29.76 |
| cpu time | 0.21 seconds |

```
199 DATA A; SET A;
```

```
200 IF LSTATUS = 'L' THEN HD = 1; ELSE HD = 0;
```

```
201
```

NOTE: There were 75159 observations read from the data set RMC.A.

NOTE: The data set RMC.A has 75159 observations and 94 variables.

NOTE: DATA statement used (Total process time):

| | |
|-----------|--------------|
| real time | 1:33.71 |
| cpu time | 0.31 seconds |

```
202 PROC SORT DATA = A; BY TYPE;
```

```
203 TITLE1 'THE MEANS OF THE VARIABLES ON THE ROUTES:'
```

NOTE: There were 75159 observations read from the data set RMC.A.

NOTE: The data set RMC.A has 75159 observations and 94 variables.

NOTE: PROCEDURE SORT used (Total process time):

| | |
|-----------|--------------|
| real time | 1:42.64 |
| cpu time | 0.39 seconds |

```

204 PROC MEANS DATA=A MEAN STD;
205 BY TYPE;
206 VAR MILES BOXESR BOXESCT BOXESRL NDCBUT PARLOCK POUCHT WITHDT
207 LETTERS FLATS PARCELS BOXHOLD CODCUST REGCERT MARKUP CHGADDR
208 F3821 LOADING PERSNLT MONORDR LETCOLL PARCACC REGACC POSTDUE
209 STAMPST RETRCT ALLOWT DSMOUNT DSMFEET DPS1 DPS2 SECSEG REUNLDT GOVVEHT
210 SCANT SCANITEM CPU CPUITEM FSS1 FSS2 PARS ;
211

```

NOTE: There were 75159 observations read from the data set RMC.A.

NOTE: PROCEDURE MEANS used (Total process time):

| | |
|-----------|---------------|
| real time | 55.99 seconds |
| cpu time | 0.82 seconds |

```

212 DATA A; SET A;
213 ****;
214 *OTHER CHANGES FY 2009:
215 *1. FORMS 3579 NO LONGER USED;
216 *2. REPLACE WITH FORM 3821 CLEARANCE ITEMS - TREAT AS FIXED ;
216! ;
217 *3. APR 2009 - NO REQUIREMENT FOR LOADING TIME TO BE <= 90;
218 *4. NO LONGER APPLICABLE - STAMPS TIME IS 20 MINUTES FOR ;
219 * ROUTE REGARDLESS OF L STATUS (4/23/09
220 ****;
221 STAMPTF = STAMPST; STAMPTV = 0;
222 LOADTF = LOADNGT *.5;
223 LOADTV = LOADNGT *.5;
224 F3821TF = F3821T;
225
226 IF PPACCRT = 0 THEN PPACCRT = PPACCOT;
227
228 FIXED = MILEST + BOXESRT + BOXESCT + NDCBUT + PARLKCT + POUCHT
229 + WITHDT + ADDREST + F3821TF + LOADTF + PERSNLT + STAMPTF
230 + ALLOWT + DISMNTT + DISMNTDT + GOVVEHT + REUNLDT + PARST + SCANT;
231 VARIABLE =
232     DLLETRT + DLFLETT + DLPAROT + DLPARRT
233     + BOXHLDT + CODCSOT + CODCSR
234     + DLREGOT + DLREGRT + MARKUPT + STRAPT + LOADTV
235     + MNORDOT + MNORDRT + COLLFT + PPACCOT + PPACCRT + COLREGT
236     + POSTDUT + STAMPTV + RETRCTT + DPST + SECSEGT + CPUOFCT + CPURTET +
237     + CPUITEMT + DPSFLATT + SCNITEMT ;
238
239 TOTAL = FIXED + VARIABLE;
240 RATIO = VARIABLE/TOTAL;

```

NOTE: There were 75159 observations read from the data set RMC.A.

NOTE: The data set RMC.A has 75159 observations and 103 variables.

NOTE: DATA statement used (Total process time):

| | |
|-----------|--------------|
| real time | 1:36.95 |
| cpu time | 0.50 seconds |

```

241 PROC SORT DATA=A; BY TYPE;

```

NOTE: There were 75159 observations read from the data set RMC.A.
NOTE: The data set RMC.A has 75159 observations and 103 variables.
NOTE: PROCEDURE SORT used (Total process time):

real time 1:59.26
cpu time 0.81 seconds

```
242 PROC MEANS DATA=A NOPRINT;  
243 BY TYPE;  
244 VAR VARIABLE TOTAL;  
245 OUTPUT OUT=VAR MEAN=;
```

NOTE: There were 75159 observations read from the data set RMC.A.
NOTE: The data set RMC.VAR has 2 observations and 5 variables.
NOTE: PROCEDURE MEANS used (Total process time):

real time 1:01.13
cpu time 0.07 seconds

```
246 DATA VAR; SET VAR;  
247 VARRAT = VARIABLE/TOTAL;
```

NOTE: There were 2 observations read from the data set RMC.VAR.
NOTE: The data set RMC.VAR has 2 observations and 6 variables.
NOTE: DATA statement used (Total process time):

real time 2.67 seconds
cpu time 0.09 seconds

```
248 PROC PRINT DATA=VAR;  
249 TITLE1 'RATIO OF VARIABLE TO TOTAL FOR EVAL/OTHER';  
250 RUN;
```

NOTE: There were 2 observations read from the data set RMC.VAR.
NOTE: PROCEDURE PRINT used (Total process time):

real time 0.44 seconds
cpu time 0.01 seconds

E. SAS Program Output

SAS output from the March 2018 RMC data file.

The SAS System

The FREQ Procedure

Table of YEAR by TYPE

| YEAR | TYPE | | |
|-------|-----------|---------|--------|
| | Frequency | Percent | |
| | Row Pct | Col Pct | |
| | | | Total |
| 2012 | 1448 | 1 | 1449 |
| | 1.93 | 0.00 | 1.93 |
| | 99.93 | 0.07 | |
| | 2.10 | 0.02 | |
| 2013 | 877 | 0 | 877 |
| | 1.17 | 0.00 | 1.17 |
| | 100.00 | 0.00 | |
| | 1.27 | 0.00 | |
| 2014 | 590 | 0 | 590 |
| | 0.78 | 0.00 | 0.78 |
| | 100.00 | 0.00 | |
| | 0.86 | 0.00 | |
| 2015 | 1624 | 0 | 1624 |
| | 2.16 | 0.00 | 2.16 |
| | 100.00 | 0.00 | |
| | 2.36 | 0.00 | |
| 2016 | 2478 | 529 | 3007 |
| | 3.30 | 0.70 | 4.00 |
| | 82.41 | 17.59 | |
| | 3.60 | 8.43 | |
| 2017 | 113 | 11 | 124 |
| | 0.15 | 0.01 | 0.16 |
| | 91.13 | 8.87 | |
| | 0.16 | 0.18 | |
| 2018 | 61770 | 5736 | 67506 |
| | 82.17 | 7.63 | 89.80 |
| | 91.50 | 8.50 | |
| | 89.65 | 91.38 | |
| Total | 68900 | 6277 | 75177 |
| | 91.65 | 8.35 | 100.00 |

